Abstract

A line level selection unit is described that selects signals from a backplane. The line level selection unit has a clock that times egress time slots associated with an egress network line coupled to the egress channel. The egress channel has a primary protection group table that correlates the egress time slots to a protection group for each ingress signal used to fill the egress time slots. The protection group table has an output coupled to a channel select input of a first multiplexer. The first multiplexer has input values that reflect the status of each protection group for each ingress signal. The first multiplexer has an output coupled to a channel select input of a second multiplexer. The second multiplexer receives a plurality of inputs from a plurality of tables that indicate where an ingress signal may be found on the backplane.